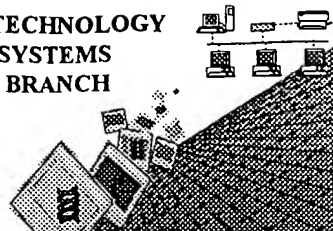


BIOTECHNOLOGY  
SYSTEMS  
BRANCH



**RAW SEQUENCE LISTING**  
**ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/876,257  
Source: 1600  
Date Processed by STIC: 7/24/2002

RECEIVED

AUG 01 2002

TECH CENTER 1600/2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

# Raw Sequence Listing Error Summary

## ERROR DETECTED

## SUGGESTED CORRECTION

SERIAL NUMBER: 09/876,257

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics  
    Wrapped Aminos  
The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2      Invalid Line Length  
The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3      Misaligned Amino  
    Numbering  
The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4      Non-ASCII  
The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 ✓ Variable Length  
Sequence(s) 2 and 6 contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6      PatentIn 2.0  
    "bug"  
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)             . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7      Skipped Sequences  
    (OLD RULES)  
Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped  
  
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8      Skipped Sequences  
    (NEW RULES)  
Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 9      Use of n's or Xaa's  
    (NEW RULES)  
Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10      Invalid <213>  
    Response  
Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11      Use of <220>  
Sequence(s)      missing the <220> "Feature" and associated numeric identifiers and responses.  
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12      PatentIn 2.0  
    "bug"  
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13      Misuse of n  
n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

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1600

## RAW SEQUENCE LISTING

DATE: 07/24/2002

PATENT APPLICATION: US/09/876,257

TIME: 10:54:43

Input Set : A:\EP.txt

Output Set: N:\CRF3\07242002\I876257.raw

**Does Not Comply**  
**Corrected Diskette Needed**
*pp 1,3-5*

3 <110> APPLICANT: Meloen, Robert H  
 4 Oonk, Hendrica B  
 6 <120> TITLE OF INVENTION: PEPTIDE, IMMUNOGENIC COMPOSITION AND VACCINE OR MEDICAL  
 PREPARATION, A  
 7 METHOD TO IMMUNISE ANIMALS AGAINST THE HORMONE LHRH, AND ANALOGS OF THE LHRH  
 8 TANDEM REPEAT PEPTIDE AND THEIR USE AS VACCINE  
 10 <130> FILE REFERENCE: 3516.2US  
 12 <140> CURRENT APPLICATION NUMBER: US 09/876,257  
 13 <141> CURRENT FILING DATE: 2001-06-06  
 15 <160> NUMBER OF SEQ ID NOS: 6  
 17 <170> SOFTWARE: PatentIn version 3.1  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 10  
 21 <212> TYPE: PRT  
 22 <213> ORGANISM: Unknown  
 24 <220> FEATURE:  
 25 <223> OTHER INFORMATION: Luteinising Hormone Releasing Hormone (LHRH) from the  
 hypothalamu  
 26 s of an undisclosed mammal.  
 28 <220> FEATURE:  
 29 <221> NAME/KEY: misc\_feature  
 30 <222> LOCATION: (1)..(1)  
 31 <223> OTHER INFORMATION: X at position 1 = pyroglutamic acid  
 34 <220> FEATURE:  
 35 <221> NAME/KEY: misc\_feature  
 36 <222> LOCATION: (10)..(10)  
 37 <223> OTHER INFORMATION: X at position 10 = glycine amide  
 40 <400> SEQUENCE: 1  
 42 Xaa His Trp Ser Tyr Gly Leu Arg Pro Xaa  
 43 1 5 10  
 46 <210> SEQ ID NO: 2  
 47 <211> LENGTH: 21  
 48 <212> TYPE: PRT  
 49 <213> ORGANISM: Artificial Sequence  
 51 <220> FEATURE:  
 52 <223> OTHER INFORMATION: Vaccine against LHRH from the hypothalamus of an undisclosed  
 mamm  
 53 al.  
 55 <220> FEATURE:  
 56 <221> NAME/KEY: misc\_feature  
 57 <222> LOCATION: (1)..(1)  
 58 <223> OTHER INFORMATION: X at position 1 = preferably pyroglutamic acid, but can also  
 be g  
 59 lutamine having attached thereto a tail comprising one or more ad

60       ditional amino acids  
63 <220> FEATURE:  
64 <221> NAME/KEY: misc\_feature

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/876,257

DATE: 07/24/2002

TIME: 10:54:43

Input Set : A:\EP.txt

Output Set: N:\CRF3\07242002\I876257.raw

65 <222> LOCATION: (3)..(3)

66 <223> OTHER INFORMATION: X at position 3 = tryptophan or formylated tryptophan

69 <220> FEATURE:

70 <221> NAME/KEY: misc\_feature

71 <222> LOCATION: (14)..(14)

72 <223> OTHER INFORMATION: X at position 14 = tryptophan or formylated tryptophan

75 <220> FEATURE:

76 <221> NAME/KEY: misc\_feature

77 <222> LOCATION: (10)..(20)

78 <223> OTHER INFORMATION: The sequence comprising residues 10-20 may be repeated.

81 <220> FEATURE:

82 <221> NAME/KEY: misc\_feature

83 <222> LOCATION: (11)..(11)

84 <223> OTHER INFORMATION: X at position 11 = either a direct bond or a spacer group *Xaa can only represent a single amino acid.*

between

85 the amino acids glycine and glutamine; the spacer group may greatly *see item 5*

86 vary from one or more amino acids to a shorter or longer hydrocarbon chain and other compound groups or molecules. *on Error summary sheet*

87

90 <220> FEATURE:

91 <221> NAME/KEY: misc\_feature

92 <222> LOCATION: (21)..(21)

93 <223> OTHER INFORMATION: X at position 21 = either Gly-NH<sub>2</sub> or Gly having attached

thereto

94 a tail comprising one or more additional amino acids; preferably

95 Gly-Cys-NH<sub>2</sub>, the C terminal cysteine being added in connection with

96 the possible coupling of the peptide to a carrier protein.

99 <400> SEQUENCE: 2

W--> 101 Xaa His Xaa Ser Tyr Gly Leu Arg Pro Gly Xaa Gln His Xaa Ser Tyr

102 1 5 10 15

W--> 105 Gly Leu Arg Pro Xaa

106 20

109 <210> SEQ ID NO: 3

110 <211> LENGTH: 22

111 <212> TYPE: PRT

112 <213> ORGANISM: Artificial Sequence

114 <220> FEATURE:

115 <223> OTHER INFORMATION: Vaccine against LHRH from the hypothalamus of an undisclosed

mamm

116 al.

118 <220> FEATURE:

119 <221> NAME/KEY: misc\_feature

120 <222> LOCATION: (1)..(1)

121 <223> OTHER INFORMATION: X at position 1 = pyroglutamic acid

124 <220> FEATURE:

125 <221> NAME/KEY: misc\_feature

126 <222> LOCATION: (3)..(3)

127 <223> OTHER INFORMATION: X at position 3 = tryptophan or N-formyl-Trp

130 <220> FEATURE:

131 <221> NAME/KEY: misc\_feature

132 <222> LOCATION: (13)..(13)

133 <223> OTHER INFORMATION: X at position 13 = tryptophan or N-formyl-Trp

136 <220> FEATURE:

## RAW SEQUENCE LISTING

DATE: 07/24/2002

PATENT APPLICATION: US/09/876,257

TIME: 10:54:43

Input Set : A:\EP.txt

Output Set: N:\CRF3\07242002\I876257.raw

137 <221> NAME/KEY: misc\_feature  
 138 <222> LOCATION: (10)..(19)  
 139 <223> OTHER INFORMATION: The sequence comprising residues 10-19 may be repeated.  
 142 <220> FEATURE:  
 143 <221> NAME/KEY: misc\_feature  
 144 <222> LOCATION: (22)..(22) *Xaa can only represent a single amino acid, nothing else.*  
 145 <223> OTHER INFORMATION: X at position 22 = NH2  
 148 <400> SEQUENCE: 3  
 W--> 150 Xaa His Xaa Ser Tyr Gly Leu Arg Pro Gly Gln His Xaa Ser Tyr Gly  
 151 1 5 10 15  
 W--> 154 Leu Arg Pro Gly Cys (Xaa)  
 155 20  
 158 <210> SEQ ID NO: 4  
 159 <211> LENGTH: 21  
 160 <212> TYPE: PRT  
 161 <213> ORGANISM: Artificial Sequence  
 163 <220> FEATURE:  
 164 <223> OTHER INFORMATION: Vaccine against LHRH from the hypothalamus of an undisclosed  
 mamm  
 165 al.  
 167 <220> FEATURE:  
 168 <221> NAME/KEY: misc\_feature  
 169 <222> LOCATION: (1)..(1)  
 170 <223> OTHER INFORMATION: X at position 1 = pyroglutamic acid  
 173 <220> FEATURE:  
 174 <221> NAME/KEY: misc\_feature  
 175 <222> LOCATION: (6)..(6)  
 176 <223> OTHER INFORMATION: X at position 6 = a possible replacement of glycine by a  
 dextror  
 177 otatory amino acid which in addition contains a side chain by whic  
 178 h the LHRH tandem unit can be coupled to a carrier compound.  
 181 <220> FEATURE:  
 182 <221> NAME/KEY: misc\_feature  
 183 <222> LOCATION: (16)..(16)  
 184 <223> OTHER INFORMATION: X at position 16 = a possible replacement of glycine by a  
 dextror  
 185 otatory amino acid which in addition contains a side chain by whi  
 186 ch the LHRH tandem unit can be coupled to a carrier compound.  
 189 <400> SEQUENCE: 4  
 W--> 191 Xaa His Trp Ser Tyr Xaa Leu Arg Pro Gly Gln His Trp Ser Tyr Xaa  
 192 1 5 10 15  
 195 Leu Arg Pro Gly Cys  
 196 20  
 199 <210> SEQ ID NO: 5  
 200 <211> LENGTH: 11  
 201 <212> TYPE: PRT  
 202 <213> ORGANISM: Artificial Sequence  
 204 <220> FEATURE:  
 205 <223> OTHER INFORMATION: Vaccine against LHRH from the hypothalamus of an undisclosed  
 mamm  
 206 al.  
 208 <220> FEATURE:  
 209 <221> NAME/KEY: misc\_feature

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/876,257

DATE: 07/24/2002

TIME: 10:54:43

Input Set : A:\EP.txt

Output Set: N:\CRF3\07242002\I876257.raw

210 <222> LOCATION: (1)..(1)  
 211 <223> OTHER INFORMATION: X at position 1 = pyroglutamic acid  
 214 <220> FEATURE:  
 215 <221> NAME/KEY: misc\_feature  
 216 <222> LOCATION: (6)..(6)  
 217 <223> OTHER INFORMATION: X at position 6 = Gly or a dextrorotatory amino acid  
 containing a  
 218 side chain that allows coupling to a carrier compound.  
 221 <400> SEQUENCE: 5  
 W--> 223 Xaa His Trp Ser Tyr Xaa Leu Arg Pro Gly Cys  
 224 1 5 10  
 227 <210> SEQ ID NO: 6  
 228 <211> LENGTH: 21  
 229 <212> TYPE: PRT  
 230 <213> ORGANISM: Artificial Sequence  
 232 <220> FEATURE:  
 233 <223> OTHER INFORMATION: Vaccine against LHRH from the hypothalamus of an undisclosed  
 mamm  
 234 al.  
 236 <220> FEATURE:  
 237 <221> NAME/KEY: misc\_feature  
 238 <222> LOCATION: (21)..(21)  
 239 <223> OTHER INFORMATION: X at position 21 = glycine amide or Gly-Cys  
 242 <220> FEATURE:  
 243 <221> NAME/KEY: misc\_feature  
 244 <222> LOCATION: (1)..(21)  
 245 <223> OTHER INFORMATION: The initial cysteine of the peptide comprising residues 1-21  
 is j  
 246 oined to the initial cysteine of an identical peptide (residues 2  
 247 2-42) to form a dimer.  
 250 <220> FEATURE:  
 251 <221> NAME/KEY: misc\_feature  
 252 <222> LOCATION: (1)..(1)  
 253 <223> OTHER INFORMATION: X at position 1 = Cys-Gln  
 256 <400> SEQUENCE: 6  
 W--> 258 Xaa His Trp Ser Tyr Gly Leu Arg Pro Gly Gln His Trp Ser Tyr Gly  
 259 1 5 10 15  
 W--> 262 Leu Arg Pro Gly Xaa  
 263 20

Xaa can only  
 represent a  
 single amino  
 acid

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/876,257

DATE: 07/24/2002  
TIME: 10:54:44

Input Set : A:\EP.txt  
Output Set: N:\CRF3\07242002\I876257.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 1,10 /  
Seq#:2; Xaa Pos. 1,3,11,14,21 /  
Seq#:3; Xaa Pos. 1,3,13,22 /  
Seq#:4; Xaa Pos. 1,6,16 /  
Seq#:5; Xaa Pos. 1,6 /  
Seq#:6; Xaa Pos. 1,21